



SECTION 2

RESULTS AND DISCUSSION

Table 2-1 provides a detailed summary of the emission results. Any differences between the calculated results presented in the appendices and the results reported in the summary table are due to rounding for presentation.

TABLE 2-1
NO. 3 RECOVERY FURNACE
SUMMARY OF PM, NO_x, SO₂, AND CO EMISSION RESULTS

	Run 1	Run 2	Run 3	Mean
Date	7/30/08	7/30/08	7/30/08	----
Time Began	1046	1219	1349	----
Time Ended	1152	1329	1454	----
Stack Gas Data				
Temperature, °F	376	400	374	383
Velocity, ft/sec	81	83	81	82
Moisture, %	24	24	25	24
CO ₂ Concentration, %	13.4	13.4	13.3	13.4
O ₂ Concentration, %	6.1	6.2	6.1	6.1
VFR, x 10 ⁵ dscfm	1.99	1.98	1.98	1.98
Particulate Matter				
Isokinetic Sampling Rate, %	97	100	102	100
Concentration, gr/dscf	0.022	0.022	0.019	0.021
Concentration, gr/dscf @ 8% O ₂	0.019	0.019	0.017	0.018
Permit Limit, gr/dscf @ 8% O₂	----	----	----	0.025
Nitrogen Oxides				
Concentration, ppm	64.0	63.0	64.0	63.7
Concentration, ppm @ 8% O ₂	55.8	55.3	55.8	55.6
Permit Limit, ppm @ 8% O₂	----	----	----	78
Sulfur Dioxide				
Concentration, ppm	<2.0	<2.0	<2.0	<2.0
Concentration, ppm @ 8% O ₂	<1.7	<1.8	<1.7	<1.7
Emission Rate, lb/hr	<4.0	<4.0	<3.9	<4.0
Permit Limit, lb/hr	----	----	----	270
Carbon Monoxide				
Concentration, ppm	194	167	173	178
Concentration, ppm @ 8% O ₂	169	147	151	156
Emission Rate, lb/hr	168	144	149	154
Permit Limit, lb/hr	----	----	----	235

CEMS times were as follows: R1 = 1048-1151, R2 = 1219-1322, and R3 = 1349-1452.